

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

100011

22/F, Great Eagle Centre, 23 Harbour
Road, Wanchai, HONG KONG, P.R. China
CHINA PATENT AGENT(H.K.) LTD
WANG,Zhongzhong

PCT

**WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY**

(PCT Rule 43 *bis*.1)

Date of mailing

(day/month/year) 08 FEB 2007 (08.02.2007)

Applicant's or agent's file reference

FPEL06150026

FOR FURTHER ACTION

see paragraph 2 below

International application No.

PCT/CN2006/000829

International filing date (day/month/year)

27 April 2006 (27.04.2006)

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC

G06F 17/30 (2006.01) i

Applicant

INTEL CORPORATION et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.


Name and mailing address of the ISA/CN

The State Intellectual Property Office, the
P.R.China 6 Xitucheng Rd., Jimen Bridge,
Haidian District, Beijing, China 100088
Facsimile No. 86-10-62019451

Date of completion of this opinion

24 January 2007 (24.01.2007)

Authorized officer


CHEN Ruyan
印汝

Telephone No. (86-10) 62085025

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2006/000829

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed
☐ filed together with the international application in electronic form
☐ furnished subsequently to this Authority for the purposes of search

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/CN2006/000829

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement:

Novelty (N)	Claims 1-20	YES
	Claims none	NO
Inventive step (IS)	Claims 1-20	YES
	Claims none	NO
Industrial applicability (IA)	Claims 1-20	YES
	Claims none	NO

2. Citations and explanations

(1) Reference is made to the following documents:

D1: US 6665669 B2

D2: US 6816867 B2

(2) The present invention discloses a system based method for content based-partitioning and mining.

(3) D1 discloses the methods and apparatus and data structures useful for mining databases for frequent items. The invention uses a frequent pattern tree to represent the contents of a database in a manner which is conducive to data mining. The frequent pattern tree tends to be smaller than the original database. A frequent pattern tree can be mined recursively. The frequent pattern tree and associated methods and apparatus of this invention is relatively fast, efficient and scalable and can be used to mine both long and short frequent patterns.

D2 discloses a data mining tool, the data mining tool is described that includes a data structure populator that stores one or more first sets of data selected for querying into a first data structure. The tool also has a query builder that builds at least a first query based, at least in part, on one or more query parameters. Also included in the tool is a query manager that interrogates the first data structure with the first query. The one or more first sets of data are based, at least in part, on experiments using both synthesized probe arrays and spotted probe arrays.

(4) It is obvious that the technical features related to "probe structure" and/or "content-based partitioning logic" in claims 1, 10 and 15 aren't disclosed by D1 or D2, and further the technical solutions claimed are not obvious to a person skilled in the art on the basis of D1, D2 or their combination. Thus, claims 1, 10 and 15 have novelty under PCT Article 33(2), and have inventive step under PCT Article 33(3).

Claims 2-9 are dependent on claim 1, claims 11-14 are dependent on claim 10 and claims 16-20 are dependent on claim 15, therefore, claims 2-9, 11-14, 16-20 also meet the requirements of the PCT with respect to novelty and inventive step.

Claims 1-20 have industrial applicability under PCT Article 33(4), because the technical solutions claimed can be made or used in the industry.